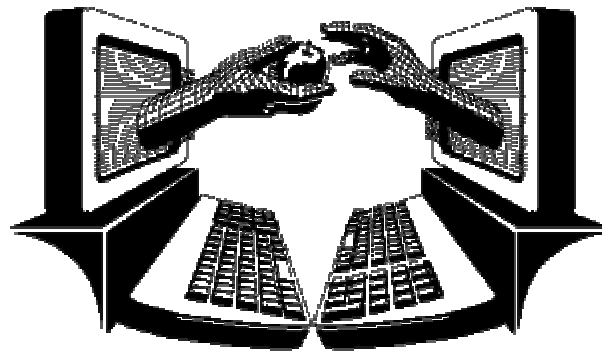


Review of
Kansas Board of Examiners in Optometry
Professional Data
2002

Health Care Data Governing Board

Roderick L. Bremby, Chairman



August 2003

Review of
Kansas Board of Examiners in Optometry
Professional Data

2002

Prepared by:

Kansas Department of Health and Environment
Center for Health & Environmental Statistics
Office of Health Care Information

Phone: (785) 368-7394
FAX: (785) 368-7118

Table of Contents

Table of Contents	i
List of Figures and Tables	ii
Executive Summary	1
Introduction	2
Doctors of Optometry (definition)	3
Optometrists by Age and Gender	4
Optometrists by Type of License	5
Optometrists by Primary Practice Site	5
Optometrists by First Kansas County of Practice	6
Optometrists by Peer Group of Counties	7
FTE Optometrists by County	8
FTE Optometrists by Peer Group of Counties	9
Appendix A: Survey Form	10
Appendix B: Persons per Optometrist and Persons per FTE Optometrist	12
Appendix C: Peer Groups of Counties	15
Appendix D: Calculation of Full Time Equivalents (FTEs)	18

List of Figures and Tables

Figure 1: Optometrists by Age Group by Gender	4
Figure 2: Persons per Optometrist by First Kansas County of practice	6
Figure 3: Persons per Optometrist by Peer Group of Counties	7
Figure 4: Persons per FTE Optometrist by County of Practice	8
Figure 5: Persons per FTE Optometrist by Peer Group of Counties	9
Figure C-1: Peer Groups of Counties, Kansas, 2002	17

Table 1: Optometrists by Age Group by Gender	4
Table 2: Optometrists by Type of License	5
Table 3: State of Primary Practice	5
Table B-1: Persons per Optometrist by First Kansas County of Practice	13
Table B-2: Persons per FTE Optometrist by County of Practice	14

Executive Summary

Surveys returned with optometrists' license renewal forms, as of December 31, 2002, showed that:

- There were 555 optometrists licensed. Of these, 453 had at least one practice site in Kansas, with 444 having their primary practice site in Kansas.
- Over three-fourths (77.8%) of optometrists, overall, were male. However, 44.5% of all optometrists under age 35 were female, reflecting the growing number of females entering the profession.
- There were 515 optometrists holding a therapeutic (TPA) license. Of those, 256 additionally held a glaucoma (GLC) license.
- The frontier counties had the greatest number of optometrists per person (by first Kansas county of practice) and the greatest number of FTE optometrists per person.

Introduction

This document, “Review of Kansas Board of Examiners in Optometry Professional Data, 2002,” is part of a series of publications requested by the Health Care Data Governing Board to make information available about the health care system in the state of Kansas. A brief summary regarding the request for an inventory of health care professionals, of which this document is a part, can be found in the series preface at the beginning of the associated notebook.

This document provides an overview of the 555 doctors of optometry licensed by the Kansas Board of Examiners in Optometry as of December 31, 2002. Data were compiled from questionnaires returned by these professionals with their annual license renewal applications (see Appendix A for a sample questionnaire).

Certain analyses require some background information. Analysis of the number of professionals by county of practice relies on the fact that the questionnaire asks questions about the primary, secondary and tertiary place of practice, from which this report focuses on county of practice and hours practiced. These variables are analyzed in several different ways. First, professionals are counted by the first practice site they list which is in a Kansas county. For example, if a professional’s primary place of practice is in Missouri and his secondary place of practice is in Johnson County, Kansas, he is counted as a professional practicing in Johnson County.

Secondly, each county has been grouped with counties of similar population density into one of five “peer groups” (see definition in Appendix D), and charts have been prepared of persons per professional by peer group.

Lastly, full time equivalents (FTEs) have been calculated for each profession by county. A full time equivalent is considered to be 40 hours per week of professional practice. Therefore, if one optometrist, for example, practiced 20 hours per week in Johnson County (as a primary, secondary or tertiary site) and another optometrist also practiced 20 hours per week in Johnson County (as a primary, secondary or tertiary site), the two together would account for one FTE optometrist. Please see Appendix D for a further discussion of calculation of full time equivalents.

Doctors of Optometry

The practice of optometry means:

- 1) The examination of the human eye and its adnexae and the employment of objective or subjective means or methods (including the administering, prescribing or dispensing, of topical pharmaceutical drugs) for the purpose of diagnosing the refractive, muscular, or pathological condition thereof;*
- 2) The prescribing or adapting of lenses (including any ophthalmic lenses which are classified as drugs by any law of the United States or of this state), prisms, low vision rehabilitation services, orthoptic exercises and visual training therapy for the relief of any insufficiencies or abnormal conditions of the human eye and its adnexae; and*
- 3) Except as otherwise limited by this section, the prescribing, administering or dispensing of topical pharmaceutical drugs and oral drugs for the examination, diagnosis and treatment of any insufficiencies or abnormal conditions of the human eye and its adnexae (KSA 65-1501(a)).*

Optometrists by Age and Gender

Over three-fourths (77.8%) of optometrists overall were male. However, 44.5 percent of all optometrists under age 35 were female, reflecting the growing number of females entering the profession. The largest numbers of male optometrists were in the 35-44 and the 45-54 age groups (Figure 1 and Table 1).

Figure 1. Optometrists by Age Group by Gender

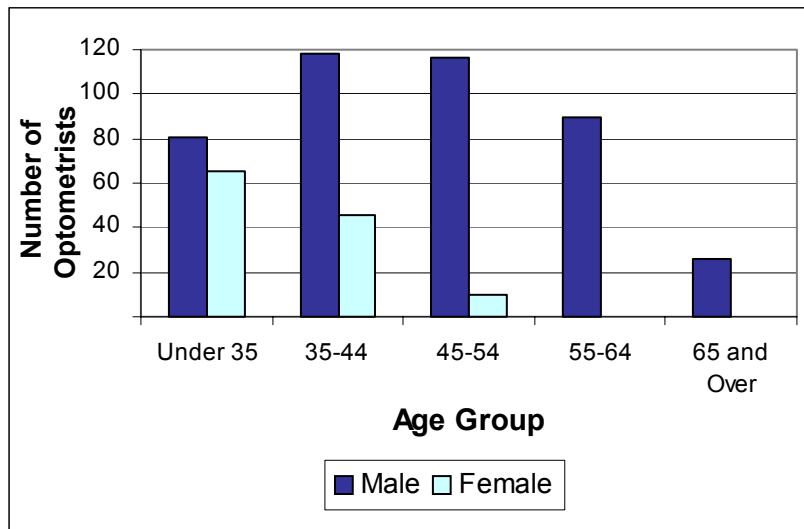


Table 1. Optometrists by Age Group by Gender

Age Group	Males		Females		Gender Not Stated	Total
	Number	Percent	Number	Percent		
Under 35	81	55.5	65	44.5	0	146
35 – 44	118	72.0	46	28.0	0	164
45 – 54	116	92.1	10	7.9	0	126
55 – 64	90	100.0	0	0.0	0	90
65 and Over	26	100.0	0	0.0	0	26
Age Not Stated	1	-	2	-	0	3
Total	432	77.8	123	22.2	0	555

Optometrists by Type of License

In the past, there were three levels of licensure for optometrists: non-pharmaceutical (NPA), diagnostic pharmaceutical (DPA) and therapeutic pharmaceutical (TPA). Currently, optometrists may not receive NPA licensure, and “there are still a small number of optometrists who are taking pharmacological courses to upgrade their licenses to the TPA level; no one is permitted to take only the DPA exam presently; they must take the TPA exam, which also includes DPA subject matter” (<http://www.terraworld.net/kssbeo/history.htm>).

In addition, the 1996 Kansas legislature passed a law adding a level of licensure allowing optometrists to treat Adult Open Angle Glaucoma, after completing additional training and co-management of at least 20 glaucoma patients for at least two years with an ophthalmologist.

The 11 optometrists who currently hold an NPA license have an average age of 65.2 years. There are also 28 optometrists who still have the DPA as their highest level of licensure. Of the 515 optometrists holding a TPA license, approximately half (49.7 %) also have a glaucoma license.

Table 2. Optometrists by Type of License

Type of License	Glaucoma	Non-Glaucoma
NPA	0	11
DPA	0	28
TPA	256	259
MD	0	1

Optometrists by Primary Practice Site

Of the 555 optometrists licensed as of December 31, 2002, 444 had their primary practice in Kansas, while an additional 59 had their primary practice in Missouri, 13 in Texas, and 10 in Oklahoma (Table 3).

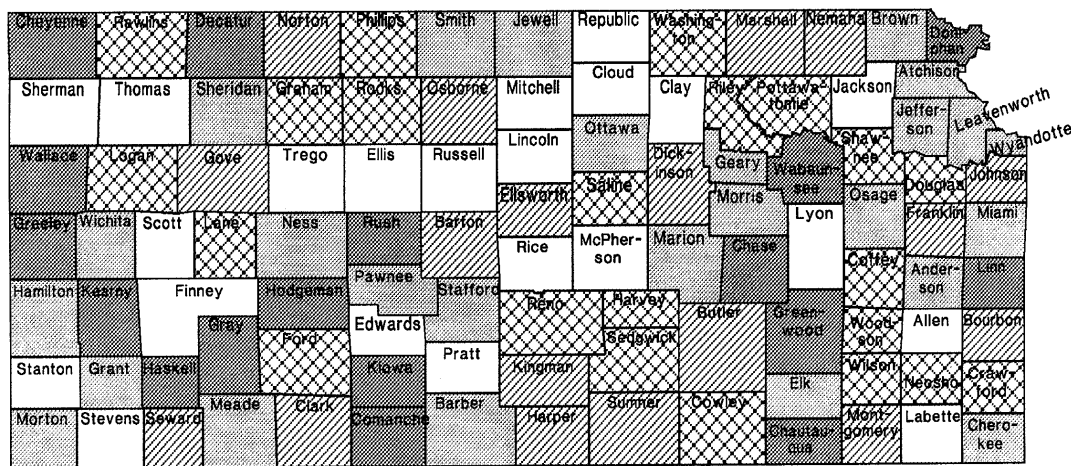
Table 3. State of Primary Practice

Primary Practice Site	Number of Optometrists	Primary Practice Site	Number of Optometrists
Alabama	1	Missouri	59
Arkansas	2	Montana	1
Arizona	2	Nebraska	6
California	2	New Mexico	2
Colorado	2	Oklahoma	10
Florida	2	Oregon	1
Georgia	1	Tennessee	4
Indiana	1	Texas	13
Kansas	444	Washington	1
Maryland	1		

Full Time Equivalent Optometrists by County

For a discussion of how full time equivalents were calculated, please see the introduction on page 2 and Appendix D. Counties with the fewest persons per full time equivalent (FTE) optometrist included Jackson (660), Mitchell (1,988), McPherson (2,127), Sherman (2,140), and Stanton (2,355). There were 17 counties with no FTE optometrists and another 33 counties with less than 1.00 FTE optometrist (Figure 4 and Appendix B, Table B-2).

Figure 4.
Persons per FTE Optometrist
By County of Practice
Kansas, 2002



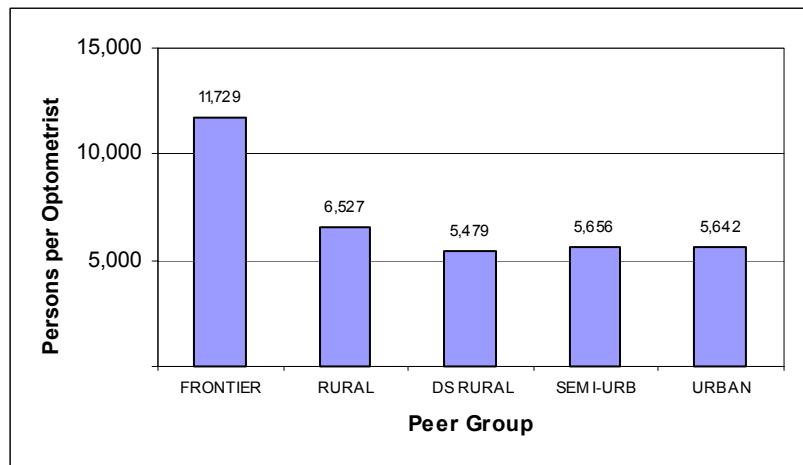
For Kansas as a whole,
there were 7,535 persons
per FTE optometrist.

Persons per FTE Optometrist	
	Less than 5,600
	5,600 - 7,999
	8,000 - 9,999
	10,000 and Over
	No FTE Optometrists

Optometrists by Peer Group of Counties

For the definition of *peer groups of counties*, please see Appendix C. The greatest number of persons per optometrist (11,729) was in frontier counties. Other peer groups all had approximately half as many persons per optometrist as did frontier counties (Figure 3).

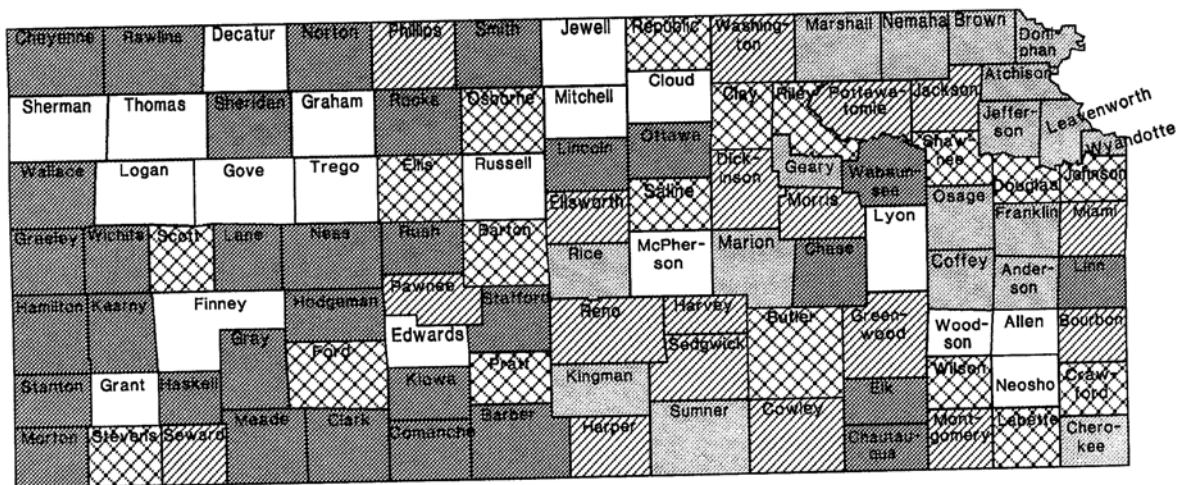
Figure 3. Persons per Optometrist by Peer Group of Counties



Optometrists by First Kansas County of Practice

For a discussion of how the first Kansas county of practice was assigned, please see the introduction on page 2. Counties with the fewest persons per optometrist included Thomas (1,563), McPherson (1,666), Russell (2,285), Graham (2,780), and Gove (2,940). There were 32 counties with no optometrists and another 28 counties with only one optometrist (Figure 2 and Appendix B, Table B-1).

Figure 2. Persons per Optometrist
By First Kansas County of Practice
Kansas, 2002



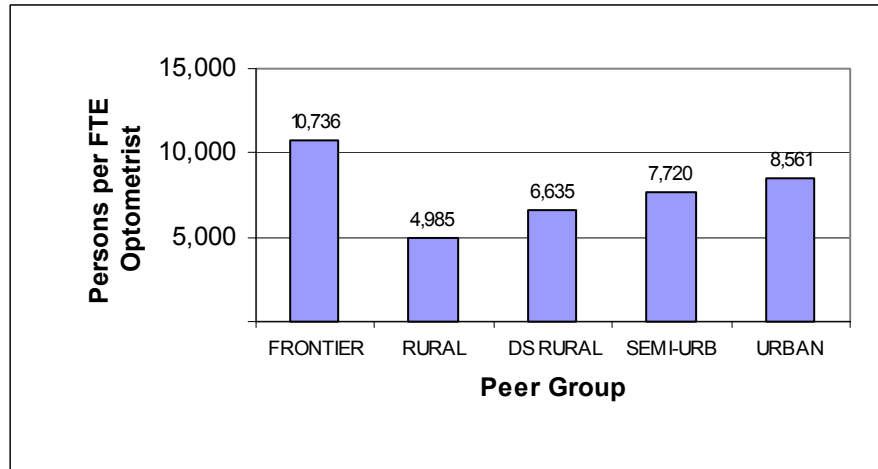
For Kansas as a whole,
there were 4,745 persons
per optometrist.

Persons per Optometrist	
	Less than 4,000
	4,000 - 5,499
	5,500 - 7,499
	7,500 and Over
	No Optometrists

Full Time Equivalent Optometrists by Peer Group of Counties

For the definition of *peer groups of counties*, please see Appendix C. The greatest number of persons per FTE optometrist (10,736) was in frontier counties, and the lowest (4,985) in rural counties (Figure 5).

Figure 5. Persons per FTE Optometrist by Peer Group of Counties



Appendix A

Survey Form

*The data on this page are those the Board has on file for you.
Please review the data carefully and make changes and additions so that your file is current*

The date in the GLC Intent Date field is the date on which your first Glaucoma treatment reporting form was received in the Board office. If there is no date in the field, your twenty-four month co-management period has not yet started.

The “No of Office Locations” field is divided by a / mark. The first number indicates the number of copies you have of your license. The second number indicates the number of practice locations you have reported to the Board. Please remember that it is your responsibility to notify the Secretary-Treasurer of any changes in your address or practice.

License No.	
Last Name	
First Name	
Middle Initial	
Title	
Date of Birth	
Insurance Carrier	
Expires	
UPIN	

License Type	
Initial License Date	
Date on KS License	
Glaucoma Lic Date	
License Expires	
SS Number	
Policy No	
Limits	
KOA Member	

Practice Name	
No. Office Locations	
Primary Address	
City	
State	
Zip	
County	
Office Phone	
Office Fax	
Email Address	
Married/Single	
Spouse's Name	
Home Address	
Home City	
Home State	
Home Zip	
Home Phone	

Associates Name(s)	
DEA Number	
2nd Address	
2nd City	
2nd State	
2nd Zip	
2nd County	
2nd Phone	
2nd Fax	
3rd City	
3rd State	
3rd Zip	
3rd County	
3rd Phone	
Hrs/wk each office	
GLC Intent Date	
No. GLC Reports	

By signing this form, I attest that all information provided this information to the Board of Examiners in Optometry the provisions of the Kansas State Optometry Laws and

above is true and accurate. I agree to submit any changes in within 30 days, and to practice optometry in accordance with Board rules and regulations.

Signature

CE HOURS: _____

DATE RECEIVED: _____

DATE RECEIPT MAILED: _____

OFFICIAL USE ONLY

RENEWAL FEE: _____

SECOND NOTICE FEE: _____

DUPLICATE LICENSE FEE: _____

TOTAL FEES: _____

Appendix B

Persons per Optometrist By First Kansas County of Practice and Persons per FTE Optometrist By County of Practice

**Table B-1: Persons per Optometrist by First Kansas County of Practice, and Rank of County
Kansas, 2002**

First KS County of Practice	* Adjusted Population	Number of Optometrists	Persons per Optometrist	Rank	First KS County of Practice	* Adjusted Population	Number of Optometrists	Persons per Optometrist	Rank
Allen	13,881	4	3,470	16	Linn	9,542	0	-	-
Anderson	8,019	1	8,019	58	Logan	2,942	1	2,942	6
Atchison	15,636	2	7,818	56	Lyon	34,292	10	3,429	14
Barber	5,023	0	-	-	Marion	27,729	2	13,865	71
Barton	26,984	5	5,397	37	Marshall	12,953	1	12,953	70
Bourbon	14,851	2	7,426	54	McPherson	9,997	6	1,666	2
Brown	10,303	1	10,303	67	Meade	4,506	0	-	-
Butler	58,488	12	4,874	28	Miami	28,143	5	5,629	39
Chase	2,821	0	-	-	Mitchell	6,360	2	3,180	10
Chautauqua	4,061	0	-	-	Montgomery	34,430	5	6,886	52
Cherokee	21,628	2	10,814	68	Morris	6,007	1	6,007	43
Cheyenne	3,070	0	-	-	Morton	3,305	0	-	-
Clark	2,336	0	-	-	Nemaha	9,977	1	9,977	66
Clay	8,541	2	4,271	21	Neosho	16,170	5	3,234	11
Cloud	9,292	3	3,097	8	Ness	3,240	0	-	-
Coffey	8,731	1	8,731	62	Norton	5,099	0	-	-
Comanche	1,914	0	-	-	Osage	16,692	1	16,692	72
Cowley	34,612	5	6,922	53	Osborne	4,123	1	4,123	20
Crawford	36,247	7	5,178	31	Ottawa	6,094	0	-	-
Decatur	3,288	1	3,288	13	Pawnee	6,078	1	6,078	47
Dickinson	18,809	3	6,270	50	Phillips	5,731	1	5,731	42
Doniphan	7,826	1	7,826	57	Pottawatomie	18,203	3	6,068	45
Douglas	93,397	18	5,189	32	Pratt	9,220	2	4,610	23
Edwards	3,278	1	3,278	12	Rawlins	2,832	0	-	-
Elk	3,055	0	-	-	Reno	60,587	10	6,059	44
Ellis	26,026	5	5,205	33	Republic	5,337	1	5,337	36
Ellsworth	5,606	1	5,606	38	Rice	9,643	1	9,643	65
Finney	39,171	10	3,917	19	Riley	52,368	11	4,761	24
Ford	31,875	6	5,313	35	Rooks	5,302	0	-	-
Franklin	24,717	3	8,239	60	Rush	3,405	0	-	-
Geary	25,833	3	8,611	61	Russell	6,855	3	2,285	3
Gove	2,940	1	2,940	5	Saline	52,459	11	4,769	25
Graham	2,780	1	2,780	4	Scott	4,840	1	4,840	27
Grant	7,824	2	3,912	18	Sedgwick	455,533	80	5,694	41
Gray	5,901	0	-	-	Seward	22,648	4	5,662	40
Greeley	1,446	0	-	-	Shawnee	165,827	33	5,025	30
Greenwood	7,462	1	7,462	55	Sheridan	2,600	0	-	-
Hamilton	2,615	0	-	-	Sherman	6,271	2	3,136	9
Harper	6,117	1	6,117	48	Smith	4,260	0	-	-
Harvey	31,913	5	6,383	51	Stafford	4,585	0	-	-
Haskell	4,256	0	-	-	Stanton	2,355	0	-	-
Hodgeman	2,113	0	-	-	Stevens	5,273	1	5,273	34
Jackson	12,508	2	6,254	49	Sumner	25,131	2	12,566	69
Jefferson	18,402	2	9,201	64	Thomas	7,814	5	1,563	1
Jewell	3,454	1	3,454	15	Trego	3,037	1	3,037	7
Johnson	471,277	98	4,809	26	Wabaunsee	6,606	0	-	-
Kearny	4,498	0	-	-	Wallace	1,668	0	-	-
Kingman	8,234	1	8,234	59	Washington	6,074	1	6,074	46
Kiowa	3,005	0	-	-	Wichita	2,477	0	-	-
Labette	21,445	5	4,289	22	Wilson	9,909	2	4,955	29
Lane	1,979	0	-	-	Woodson	3,558	1	3,558	17
Leavenworth	63,951	7	9,136	63	Wyandotte	156,734	9	17,415	73
Lincoln	3,467	0	-	-	KANSAS	2,633,727	453	4,745	
					Other States		102		

* Source: U.S. Census Bureau. Adjusted population equals total population minus the population living in group quarters.

**Table B-2: Persons per FTE Optometrist by County of Practice, and Rank of County
Kansas, 2002**

County of Practice	* Adjusted Population	Number of FTE Optometrists	Persons per FTE Optometrist	Rank	County of Practice	* Adjusted Population	Number of FTE Optometrists	Persons per FTE Optometrist	Rank
Allen	13,881	3.60	3,856	13	Linn	9,542	0.00	-	-
Anderson	8,019	0.55	14,580	77	Logan	2,942	0.50	5,884	25
Atchison	15,636	1.43	10,934	67	Lyon	34,292	6.20	5,531	22
Barber	5,023	0.20	25,115	85	Marion	27,729	1.68	16,505	79
Barton	26,984	2.75	9,812	61	Marshall	12,953	1.42	9,122	57
Bourbon	14,851	1.76	8,438	51	McPherson	9,997	4.70	2,127	3
Brown	10,303	0.95	10,845	66	Meade	4,506	0.16	28,163	87
Butler	58,488	6.92	8,452	52	Miami	28,143	2.70	10,423	65
Chase	2,821	0.00	-	-	Mitchell	6,360	3.20	1,988	2
Chautauqua	4,061	0.00	-	-	Montgomery	34,430	3.83	8,990	56
Cherokee	21,628	1.88	11,504	69	Morris	6,007	0.60	10,012	63
Cheyenne	3,070	0.00	-	-	Morton	3,305	0.17	19,441	82
Clark	2,336	0.29	8,055	47	Nemaha	9,977	1.13	8,829	55
Clay	8,541	2.53	3,376	9	Neosho	16,170	2.80	5,775	23
Cloud	9,292	2.50	3,717	12	Ness	3,240	0.24	13,500	73
Coffey	8,731	1.21	7,216	38	Norton	5,099	0.60	8,498	53
Comanche	1,914	0.00	-	-	Osage	16,692	0.88	18,968	81
Cowley	34,612	5.51	6,282	29	Osborne	4,123	0.50	8,246	50
Crawford	36,247	4.97	7,293	39	Ottawa	6,094	0.60	10,157	64
Decatur	3,288	0.00	-	-	Pawnee	6,078	0.50	12,156	70
Dickinson	18,809	2.32	8,107	48	Phillips	5,731	0.83	6,905	34
Doniphan	7,826	0.00	-	-	Pottawatomie	18,203	2.49	7,310	40
Douglas	93,397	12.98	7,195	37	Pratt	9,220	1.80	5,122	19
Edwards	3,278	1.14	2,875	8	Rawlins	2,832	0.43	6,586	31
Elk	3,055	0.06	50,917	88	Reno	60,587	8.88	6,823	33
Ellis	26,026	5.17	5,034	17	Republic	5,337	1.00	5,337	21
Ellsworth	5,606	0.70	8,009	46	Rice	9,643	1.90	5,075	18
Finney	39,171	8.97	4,367	14	Riley	52,368	8.68	6,033	28
Ford	31,875	4.78	6,668	32	Rooks	5,302	0.68	7,797	43
Franklin	24,717	2.69	9,188	58	Rush	3,405	0.00	-	-
Geary	25,833	2.35	10,993	68	Russell	6,855	1.56	4,394	15
Gove	2,940	0.32	9,188	58	Saline	52,459	9.06	5,790	24
Graham	2,780	0.40	6,950	35	Scott	4,840	1.32	3,667	11
Grant	7,824	0.50	15,648	78	Sedgwick	455,533	60.28	7,557	42
Gray	5,901	0.00	-	-	Seward	22,648	2.83	8,003	45
Greeley	1,446	0.00	-	-	Shawnee	165,827	27.74	5,978	27
Greenwood	7,462	0.00	-	-	Sheridan	2,600	0.18	14,444	76
Hamilton	2,615	0.20	13,075	71	Sherman	6,271	2.93	2,140	4
Harper	6,117	0.70	8,739	54	Smith	4,260	0.17	25,059	84
Harvey	31,913	4.29	7,439	41	Stafford	4,585	0.20	22,925	83
Haskell	4,256	0.00	-	-	Stanton	2,355	1.00	2,355	5
Hodgeman	2,113	0.00	-	-	Stevens	5,273	1.00	5,273	20
Jackson	12,508	18.94	660	1	Sumner	25,131	2.53	9,933	62
Jefferson	18,402	1.38	13,335	72	Thomas	7,814	2.98	2,622	6
Jewell	3,454	0.20	17,270	80	Trego	3,037	0.85	3,573	10
Johnson	471,277	49.91	9,443	60	Wabaunsee	6,606	0.00	-	-
Kearny	4,498	0.00	-	-	Wallace	1,668	0.00	-	-
Kingman	8,234	1.00	8,234	49	Washington	6,074	0.96	6,327	30
Kiowa	3,005	0.00	-	-	Wichita	2,477	0.18	13,761	74
Labette	21,445	4.50	4,766	16	Wilson	9,909	1.40	7,078	36
Lane	1,979	0.25	7,916	44	Woodson	3,558	0.60	5,930	26
Leavenworth	63,951	4.64	13,783	75	Wyandotte	156,734	5.94	26,386	86
Lincoln	3,467	1.30	2,667	7	KANSAS	2,633,727	349.55	7,535	

* Source: U.S. Census Bureau. Adjusted population equals total population minus the population living in group quarters.

Appendix C
Peer Groups of Counties

Peer Groups of Counties

For the purposes of demographic analysis, counties in Kansas have been grouped by population density into “Peer Groups,” as defined by the Office of Local and Rural Health of the Kansas Department of Health and Environment.

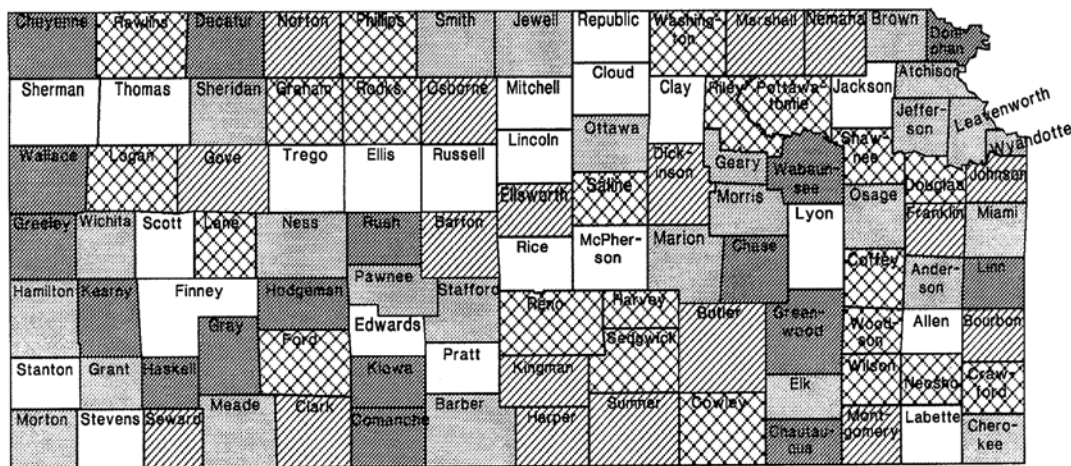
Frontier counties are defined as those with less than 6 persons per square mile, Rural counties as those with 6-19.9 persons per square mile, Densely-Settled Rural counties as those with 20-39.9 persons per square mile, Semi-Urban counties as those with 40-149.9 persons per square mile, and Urban counties as those with 150 or more persons per square mile.

Counties within a peer group are not necessarily contiguous, and the definition of “Peer Groups,” as used here, should not be confused with the U.S. Census Bureau’s definition of urban and rural areas.

Full Time Equivalent Optometrists by County

For a discussion of how full time equivalents were calculated, please see the introduction on page 2 and Appendix D. Counties with the fewest persons per full time equivalent (FTE) optometrist included Jackson (660), Mitchell (1,988), McPherson (2,127), Sherman (2,140), and Stanton (2,355). There were 17 counties with no FTE optometrists and another 33 counties with less than 1.00 FTE optometrist (Figure 4 and Appendix B, Table B-2).

Figure 4.
Persons per FTE Optometrist
By County of Practice
Kansas, 2002



For Kansas as a whole,
there were 7,535 persons
per FTE optometrist.

Persons per FTE Optometrist	
Less than 5,600	
5,600 - 7,999	
8,000 - 9,999	
10,000 and Over	
No FTE Optometrists	

Appendix D
Calculation of Full Time Equivalents

Calculation of Full Time Equivalents (FTEs)

One method for examining the availability of health care professionals is by use of “full time equivalents” (FTEs). The survey upon which this report is based (Appendix A) gathers information on the distribution of service hours by practice location. This data allows the calculation of full time equivalency statistics by county for each responding professional. Population/professional ratios are then calculated by county.

Calculation of the number of full time equivalent professionals by county is motivated by the need to identify health professional shortage areas. When inadequate health care availability is due to the shortage of primary care physicians, the area may qualify for federal programs due to designation as a Health Professional Shortage Area (HPSA), Medically Underserved Area (MUA), or an area with a Medically Underserved Population (MUP) for primary care.

The calculation of full time equivalents was prepared based on guidelines set forth by the Code of Federal Regulations (<http://www.access.gpo.gov/nara/cfr>) 42CFR – Part 5, Appendix A – Criteria for Designation of Areas Having Shortages of Primary Medical Care Professionals. One full time equivalent is based on a 40-hour workweek, and the number of hours worked at the three practice sites listed on the questionnaire was assigned to the respective counties. For example, a professional who worked 10 hours at practice site 1 in Shawnee County and 10 hours at practice site 2 in Jackson County would have been counted as .25 FTE in Shawnee County and .25 FTE in Jackson County. In cases where a professional’s total practice hours for all work sites exceeded 40, his FTE for each site was calculated as the proportion of his total hours practiced at that site. In no case was one professional assigned more than 1.0 FTE.